ABSTRACT

A temperature- and evaporation-controlled device for the crystallization of proteins from a protein-containing solution. The device comprises a compartment, such as a microcapillary tube, for holding the solution from which crystals are formed. The compartment is in communication with a cold generating unit, such as a cold finger, that maintains a temperature lower than the temperature of the compartment thereby causing de-watering of the solution. A vacuum pump can be attached to the device to reduce vapor pressure to further promote de-watering of the solution. The device can be used terrestrially or in a microgravity environment, such as in outer space, for formation of high quality protein crystals.